U.S. Application No.: 10/722,553

REMARKS

Claim 1, 13, and 16 has been amended. In the amendment, the term "a cyano group" has been deleted from alternative expressions, and the redundant definitions of R^{01} and R^{02} , " R^{01} and R^{02} each being selected from the group consisting of a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a halogen atom, and a cyano group, provided that both R^{01} and R^{02} are not hydrogen atoms at the same time", have been deleted. This amendment does not present new matter since the definitions of R⁰¹ and R⁰², "R⁰¹ represents a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, or a halogen atom; and R⁰² represents an alkyl group having 1 to 6 carbon atoms, or a halogen atom", are described in the claims, and fully overlaps the deleted definitions except the deleted "cyano group"; for example, in the remaining definitions, both R⁰¹ and R⁰² are not hydrogen atoms at the same time since R⁰² is not a hydrogen atom. Accordingly, the scope of the formula (M) is unchanged except for the deleted "cyano group". New claims 22 to 27 have been added which further limit the alternative expressions described in claims 1, 13, and 16. Upon entry of the amendment, claims 1 to 27 will be pending in the application.

I. Response to Claim Rejection under 35 U.S.C. §103

A. Fukui et al. and Hackh's Chemical Dictionary

Claims 1 and 3-15 have been rejected under 35 U.S.C. § 103 (a) as being unpatentable over the combination of Fukui et al. and The Hackh's Chemical Dictionary 4th edition.

Applicants respectfully submit that the combination of Fukui et al. and Hackh's Chemical Dictionary does not disclose the photothermographic material of the claimed invention. The Examiner has admitted that Fukui et al. does not disclose that at least

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one of R⁰¹ and R⁰² in formula (M) is different from a hydrogen atom. In order to cure the deficiency, the Examiner has relied on the disclosure of The Hackh's Chemical Dictionary 4th edition. The Examiner states "the term, butadiene, encompasses the scope of the butadiene that the conjugate carbon atom can be substituted with a group other than hydrogen atom."

The Applicant respectfully disagrees. The Hackh's Chemical Dictionary 4th edition only states as follows:

butadiene-* Bivinyl. bromo-* Bromoprene. chloro-* Chloroprene. methyl-* Isoprene. b. dicarboxylic acid. Muconic acid.

This recitation merely states that budadiene corresponds to bivinyl, that bromobutadiene is also called bromoprene, that chlorobutadiene is also called chloroprene, that methylbutadiene is also called isoprene, and that the combination of butadinene and two carboxyl groups is called muconic acid. In short, compounds relevant to butadiene are cited for reference purpose, but the compounds are not involved in the definition of butadiene. Accordingly, this recitation, by no means, states that bromoprene, chloroprene, isoprene, muconic acid, and the like are within the scope of the definition of butadiene.

Based on common understanding in the art, the term "butadiene" refers to CH₂=CHCH=CH₂, which is non-substituted. Such notion is supported by various dictionaries including "Kagaku Daijiten" (Comprehensive Chemical Dictionary) (Kyoritsu Shuppan Co., Ltd.), p. 817, WEBSTER'S New Collegiate Dictionary, p. 150, and RANDOMHOUSE WEBSTER'S COLLEGE DICTIONARY, p. 179, the copies of which are submitted herewith. The first dictionary states as follow:

"butadiene (butadiene in English; Butadien in German)

(1) referring to the chained hydrocarbons having two double bonds whose carbon number is four, consisting of the two isomers of 1,2-butadiene and 1,3-butadiene. Since the latter isomer is much important industrially, butadiene often refers to 1,3-butadiene. Regarding 1,2-butadiene, the item for methylallene can be referenced."

The other two dictionaries also state that butadiene refers to C₄H₆. In addition,

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the meaning of the term "butadiene" used in Fukui et al. must be non-substituted butadiene since the description of Fukui would be ambiguous otherwise. For example, butadiene is used in the preparation of SBR latex in paragraph [0361] of Fukui. If the scope of butadiene included many compounds, there would be no way to understand what compound is used in Examples of Fukui. For the reasons described above, Applicant respectfully submits that the Examiner's interpretation of the term "butadiene" is improper.

The Examiner has further stated "Closely related homologs, analogs, isomers in chemistry may create a prima facie case of obviousness."

However, the copolymer used in the present invention provides remarkable improvement of image storability that is unexpected from the combination of Fukui et al. and The Hackh's Chemical Dictionary 4th edition, as is clarified in Examples described in the specification of the present application, and in the Declaration submitted herewith. In the Declaration, the copolymers according to the invention provided at least 2 times better image storability than the copolymer disclosed in Fukui et al. Therefore, Applicant respectfully submits the presently claimed invention is neither taught nor suggested by the combination of Fukui et al. and The Hackh's Chemical Dictionary 4th edition.

As described above, the combination of Fukui et al. and The Hackh's Chemical Dictionary 4th edition neither teaches nor suggests the presently claimed invention.

Accordingly, Applicant respectfully requests withdrawal of the rejection.

B. Fukui et al., Hackh's Chemical Dictionary, and Ezoe et al. or Goto or Ohzeki.

Claim 2 has been rejected under 35 U.S.C. § 103 (a) as being unpatentable over Fukui et al. and Hackh's Chemical Dictionary in view of either Ezoe or Goto or Ohzeki et al. The withdrawal of the rejection is respectfully requested for the reasons set out above because of its dependency.

C. Fukui et al., Hackh's Chemical Dictionary, and Encyclopedia of Chemical Technology, Forth Edition

Claims 16-21 have been rejected under 35 U.S.C.§ 103 (a) as being unpatentable over Fukui et al., Hackh's Chemical Dictionary, and Encyclopedia of Chemical Technology, Forth Edition. The Examiner has relied on the combination of Fukui et al. and Hackh's Chemical Dictionary for explaining how a person in the art is motivated to use the polymer of the invention. However, the combination of Fukui et al. and Hackh's Chemical Dictionary neither teaches nor suggests the polymer of the invention as described in the above item A. Encyclopedia of Chemical Technology, Fourth Edition cannot cure the deficiency since it does not teach the polymer of the invention. Therefore, the combination of Fukui et al., Hackh's Chemical Dictionary, and Encyclopedia of Chemical Technology, Forth Edition neither teaches nor suggests the presently claimed invention.

Accordingly, withdrawal of the rejection is respectfully requested.

II Conclusion

In view of the foregoing remarks, it is submitted that all of the claims currently pending in the application are in condition for allowance. Early and favorable action is respectfully requested.

Respectfully submitted,

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bustier to butterfly shell

d often insolently, as a familiar term of address to a man or Watch it, Buster! 4. a spree. 5. Broncobuster. [1825-35, Amer.] ler (boos tya), n. a woman's close-fitting, sleeveless, strapless with boning to give it characteristics. isu. with boning to give it shape, worn as a blouse. [1975-80; <

mig. an undergarment so tailored; see BUST', -IER'] the (bus/al), v., -tled, -tling, n. —v.i. 1. to move or act with a show of energy (often fol. by about): bustling about in the show of energy (often fol. by about): bustling about in the 2. to abound in something: an office bustling with activity.

3. to cause to bustle; hustle. —n. 4. energetic and often noisy [1615-25; ME bustlen to hurry along] —bus/tier, n. —bus/

injly, adv. (bus/al), n. a projecting pad or framework formerly worn unthe back of a woman's skirt to support and display the drape of abric. [1780-90; orig. uncert.] —bus/tled, adj.

line (bust/lin/), n. 1. the outline or shape of a woman's bust. 2. part of a garment covering the breasts. [1935-40]

topology, n. Computers, an arrangement of computers on a garage network in which each computer is connected to a central this through which date is channeled.

through which data is channeled.

It is through which data is channeled.

It is the second of a marginal tracking a second of a second breakup. 2. a noisy party. 3. Brit. a quarrel. [1840-50]

bust (buste), adj., bust-i-er, bust-i-est. (of a woman) having a bust; bosomy. [1940-45] —bust/i-ness, n. bust/ (biz/e), adj., bus-i-er, bus-i-est, v., bus-i-ed, bus-y-ing. —adj. (biz/e) adj., bus-i-er, bus-i-est, v., bus-i-ed, bus-y-ing. —adj. (atively and attentively engaged, esp. in work. 2. not at leisure; a notatively engaged, esp. in work. 3 full of activity and con't see you. 3 full of activity and con't see you. therwise engaged: He's busy and can't see you. 3. full of activity: a busy life. 4. (of a telephone line) in use. 5. meddlesome; prying. a third with small, fussy details: The rug is too busy for this room.

1. 7. to keep occupied; make or keep busy. [bef. 1000; ME busi, with the busi busis here] bis, of bysig, bisig]—bus/i•ly, adv.—bus/y•ness, n.

bis, of bysig, bisig]—bus/i•ly, adv.—bus/y•ness, n.

bis, y•bod•y (biz/ē bod/ē), n., pl. -bod•ies, a person who pries into a meddles in the affairs of others. [1520–30]

y sig/nal, n. (on a telephone line) a rapid succession of buzzing mes, indicating that the number called is in use. [1890-95]

busy-work (biz/e wurk/), n. work often of little productive value signed so that a person will be occupied or look busy. [1840-50]

but (but; unstressed bet), conj. 1. on the contrary. My brother went, but did not. 2. and yet; nevertheless: strange but true. 3. except; save: did nothing but complain. 4. without the circumstance that: It never rains but it pours. 5. otherwise than: There is no hope but by prayer. 6. that (used esp. after doubt, deny, etc., with a negative): I prayer. 6. that (used esp. after doubt, deny, etc., with a negative): I don't doubt but you'll do it. 7. that ... not: No leaders ever existed but they were optimists. 8. (used to introduce an exclamatory expression):

But that's wonderful!

9. Informal. than: It no sooner started raining but it stopped. -prep. 10. with the exception of: No one replied but me 11. other than: nothing but trouble. —adv. 12. only; just: There is but one answer. —n. 13. buts, reservations or objections: You'll do as you're told, no buts about it. — Idiom. 14. but for, except for; were from for [bef. 900; ME buten, OE butan for phrase be utan on the -Usage. When Bur is understood as a conjunction outside, without] and the pronoun following it is understood as the subject of an incompletely expressed clause, the pronoun is in the subjective case:
Exercise lost faith in the plan but she (did not lose faith). In virtually identical contexts, when BUT is understood as a preposition, the pronoun following it is in the objective case: Everyone lost faith but her. The prepositional use is more common. When our and its following pronoun occur near the beginning of a sentence, the subjective case often appears: Everyone but she lost faith in the plan. See also AND,

blita-di-ene (byco'ta dī'ēn, dī ēn'), n. a colorless, flammable gas, CH, used chiefly in the manufacture of rubber and paint and in or-

ganic synthesis. (1895-1900; BUTA(NE) + DI-1 + -ENE)
butane (byoo'tan, byoo tan'), n. a colorless, flammable gas, C.H. used chiefly in the manufacture of rubber and as fuel. [1870-75]

buetaenol (byoot'n ôl', -ol'), n. BUTYL ALCOHOL. [1890-95]
butch (booch), adj. 1. Slang. a. (of a woman) having traits of behavlor usu. associated with males. b. (of a male) exaggeratedly masculine

in manner. 2. of or designating a haircut in which the hair is closely

cropped. —n. 3. Slang. a butch person. [1940-45] butcher (booch/ər), n. 1. a retail or wholesale dealer in meat. 2. a person who slaughters certain animals or dresses their flesh for food for market. 3. a person guilty of brutal or indiscriminate murder. 4. a rendor who hawks refreshments, newspapers, etc., as on a train. remor who hawks retreshments, newspapers, etc., as on a train.

L. 5. to slaughter or dress (animals) for market. 6. to kill indiscriminately or brutally. 7. to bungle; botch: to butcher a job. [1250–1300; ME bocher < AF; OF bo(u)chier, der. of bo(u)c he-goat]

Loutcheren, n. — Syn. See slaughter.

Loutcher-bird (booch/ər bûrd/), n. 1. any of several Eurasian or North American shrikes of the genus Lanius. 2. any of various large, heavy-billed, highly vocal songbirds of the genus Cracticus, of Australia and New Chines [1660–70]

to st

tralia and New Guinea. [1660-70] butch'er block', n. a slab of wood formed by bonding or gluing together thick laminated strips of wood in alternating light and dark strips of wood in alternating light and dark strips of wood in alternating light and dark strips (1835-45) —butch/er-block/, adj.

illeatus, of the lily family, used for making brooms. [1555-65]

butch-er-y (booch/a re), n., pl. -er-ies. 1. brutal or wanton slaughter-of-animals or humans. 2. the trade of a butcher. 3. Brit. a slaughter-house. 4: the act of bungling or botching. [1300-50; ME < AF, MF] Bute (byoot), n. 1. Also, Bute-shire (byoot/sher, -shar). a historic bute (byoot), n. 1. Also, Bute-shire (byoot/sher, -shar). a historic bute (byoot), n. 1. Also, Bute-shire (byoot/sher, -shar).

2. an island in the Firth of Clyde, in SW Scotland: part of the county Bute. 7733; 50 sq. mi. (130 sq. km).

bu-tene (byoo'ten), n. BUTYLENE.

bu-te-o (byoo'tē ō'), n., pl. -te-os. any of various soaring hawks of the genus Buteo, of both the Old and New Worlds, having broad wings and a wide, rounded tail. [1905-10; < NL; L būteō a kind of hawk or falcon] —bu'te-o-nine' (-anin', -nin), adj., n.

but-ler (but/ler), n. the chief male servant of a household, usu. in charge of wines and liquors, the serving of meals, and the supervision of other servants. [1250-1300; ME buteler < AF butuiller; see BOTTLE] But-ler (but/lər), n. 1. Benjamin Franklin, 1818-93, U.S. politician and Union general in the Civil War. 2. Samuel, 1612-80, English poet. 3. Samuel, 1835-1902, English novelist and satirist.

but/ler's pan'try, n. a service room between a kitchen and dining

butt' (but), n. 1. the end or extremity of anything, esp. the thicker, larger, or blunt end considered as a base, support, or handle: the butt of a rifle. 2. an end that is not used or consumed; remnant: a cigar butt. 3. a lean cut of pork shoulder. 4. Slang. the buttocks. 5. Slang. a cigarette. [1400-50; late ME bott (thick) end, buttock, OE butt tree stump (in place names); akin to Sw but stump; cf. BUTTOCK]

butt² (but), n. 1. an object of witticisms, ridicule, etc. 2. a target. 3. (on a target range) a wall of earth or other backstop located behind the targets to stop bullets, arrows, etc. 4. butts, a target range. 5. Obs. a goal; limit. —v.i. 6. to abut. —v.t. 7. to position or fasten an end (of something). 8. to join the ends of (two things); set end to end. [1350-1400; ME < MF but target, goal, prob. « ON butr burt, from the use of a wooden block or stump as a target in archery, etc.]

butt's (but), v.t. 1. to strike or push with the head or horns. to strike or push something or at something with the head or horns. 3. to project. 4. butt in (or out), to interfere (or stop interfering) in the affairs or conversation of others. —n. 5. a blow with the head or horns. [1150-1200; ME < AF buter, OF boter to thrust, strike <

butt (but), n. 1. any of various units of capacity, usu. considered equal to two hogsheads. 2. a large cask for wine, beer, or ale. [1350– 1400; ME bote < AF bo(u)t(e); MF < OPr bota < LL butta, buttis] butte (byoot), n. an isolated hill or mountain rising abruptly above

the surrounding land, esp. in the western U.S. and Canada. [1650-60, Amer.; < North American F; F: low hill, mound]

but-ter (but/ər), n. 1. a soft whitish or yellowish fatty solid that separates from milk or cream when it is churned, processed for cooking and table use. 2. any of various other soft spreads for bread: apple butter; peanut butter. 3. any of various substances of butterlike consistency, as certain vegetable oils solid at ordinary temperatures: cocoa butter. -v.t. 4. to put butter on or in. 5. to apply a liquefied bonding material to (a piece or area), as mortar to a course of bricks. 6. butter up, to flatter, esp. so as to gain a favor from. [bef. 1000; ME; OE butere < L būtýrum < Gk boútýron = bou-, comb. form of boûs cow¹ + -týron, n. der. of týrós cheese] —but/ter•less, adj. —but/ter• like/, adj.

but/ter-and-eggs/, n., pl. but-ter-and-eggs. (used with a sing. or pl. v.) any of several plants whose flowers are of two shades of yellow, as the toadflax. [1770-80]

but-ter-ball (but/ər bôl'), n. 1. a chubby person. 2. Northeastern U.S. the bufflehead. 3. a small spherical pat of butter. [1930-35]

but/ter bean/ or but/ter-bean/, n. 1. a variety of small-seeded lima bean, Phaseolus lunatus, grown in the southern U.S. 2. Midland and Southern U.S. any type of lima bean. [1810-20]

but-ter-cup (but/ər kup/), n. any of numerous plants of the genus Ranunculus, having glossy yellow flowers and deeply cut leaves.

but-ter-fat (but/ar fat/), n. the fatty portion of milk, from which but-ter is made, consisting of a mixture of glycerides. [1885-90]

but-ter-fin-gers (but/or fing/gerz), n., pl. -gers. (used with a sing. v.) a person who frequently drops things; clumsy person. [1830-40] —but/ter-fin/gered, adj.

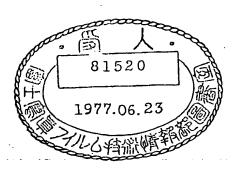
but-ter-fin/gered, adj.
but-ter-fish (but'or fish'), n., pl. (esp. collectively) -fish-es, (esp. for kinds or species) -fish. a small, flattened marine food fish, Peprilus triacanthus, of U.S. Atlantic coastal waters. [1665-75]
but-ter-fly (but'or fli'), n., pl. -flies, v., -flied, -fly-ing. -n. 1. any of numerous flying insects of the order Lepidoptera that are active by day characterized by clubbed extended a slander body and broad day, characterized by clubbed antennae, a slender body, and broad, often conspicuously marked wings. 2. a person who flits aimlessly from one interest or group to another: a social butterfly. 3. butterflies, (used with a pl. v.) Informal. a queasy feeling, as from nervousness or excitement. 4. a racing breaststroke in which the swimmer brings both arms out of the water in forward, circular motions and kicks the legs up and down together. —v.t. 5. to slit open and flatten (food) to resemble the spread wings of a butterfly: butterflied shrimp. [bef. 1000; ME boterflye, OE buttorfleoge. See BUTTER, FLY1]

but/terfly bush/, n. BUDDLEIA. [1930-35]
but/terfly chair/, n. a chair in which a canvas sling is suspended from a metal frame by its corners, forming a wide back and seat.

but/terfly effect/, n. a cumulatively large effect that a very small natural force may produce over a period of time: [1980-85; so called from the notion that the fluttering of a butterfly's wings may set off currents that will grow into a large storm)

but/terfly fish or but/ter-fly-fish, n any of various colored tropical fishes of the family Chaetodontidae, having deep, narrow bodies and darting movements suggestive of a butterfly. [1735-45] but/terfly shell, n. coquina.

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WEBSTER'S New Collegiate Dictionary busty \'bos-tē\ adj bust-i-er, -est: having a large bust bu-sul-fan \byü-'sol-fon\ n [but ane + sul/onyl]: an antineoplastic agent C₆H₁₄O₆S₂ used in the treatment of chronic myelogenous leukemis

busty \bs.-ic\ adj\ bust-i-er, -est: having a large bust busul-fan \byui-sal-fan\ n [butane + sul/onyl]: an antineoplastic agent C₆H₁₄O₆S₂ used in the treatment of chronic myelogenous leukemia busy\biz-\(\tilde{c}\) adj\ busi-er; -est [ME bisy, fr. OE bisig: akin to MD & MLG besich busy] 1 a: engaged in action: Occupied b & bisig: not see <found the telephone \(\tilde{c}\) 2: full of activity: Bustling \(\tilde{c}\) adv = busy-ness \(\tilde{c}\) as edgaged in action: Occupied \(\tilde{c}\) is being in use \(\tilde{c}\) adv = busy-ness \(\tilde{c}\) bisig: activity active: MEDDLING 4: full of distracting detail \(\tilde{c}\) \(\tilde{c}\) adv = busy-ness \(\tilde{c}\) bisy. INDUSTRIOUS. DILIGENT. ASSIDUOUS. SEDULOUS shared meaning element: actively engaged or occupied (as in work or in accomplishing an end). Busy stresses activity as opposed to idleness or leisure \(\tilde{c}\) had plenty of work to keep him busy \tilde{b}\) but does not in itself convey anything about the utility or effectiveness of the activity \(\tilde{c}\) always too busy to get a job finished \(\tilde{c}\) industrious implies habitual or characteristic attentiveness and persistent carnest application (as to work or a business) \(\tilde{c}\) an industrious boy, always ready to help his father? DILIGENT suggests earnest application to a particular occupation \(\tilde{c}\) at languages to the phis father? DILIGENT suggests earnest application to a particular occupation \(\tilde{c}\) at languages to the husband's needs> ant idle, unoccupied

2busy \(\tilde{v}\) bus-ied; busy-ing \(w\) is to make busy: Occupy \(\tilde{v}\) who bus-ied; busy-ing \(w\) is to make busy: Occupy \(\tilde{v}\) who bus-ied; busy-ing \(w\) is to make busy: Occupy \(\tilde{v}\) who bus-ied; busy-ing \(w\) is to make busy: Occupy \(\tilde{v}\) who bus-ied; busy-ing \(w\) is to make busy: Occupy \(\tilde{v}\) who \(w\) is the solid bats busied to and fro \(-\tilde{v}\) quested \(w\) or intinsic value but actually only keeps one occupied

: a flammable gaseous hydrocarbon C.H., used in making synthetic rubbers
bu-tane \'byü-tān\ n [ISV butyric + -one]: either of two
isomeric flammable gaseous parafiin hydrocarbons C.H.10 obtained
usu. from petroleum or natural gas and used as a fuel
bu-ta-nol\'byūt-n-ol.-ol\ nol\ n: either of two butyl alcohols C.4H.10
derived from normal butane
'butch-er \'būch-or\ n [ME bocher, fr. OF bouchier, fr. bouc
he-goat, prob. of Celt origin; akin to MIr bocc he-goat — more at
BUCK] 1 a: one who slaughters animals or dresses their flesh b
: a dealer in meat 2: one that kills ruthlessly or brutally 3
: BOTCHER 4: a vendor esp. on trains or in theaters
2butcher w butch-ered; butch-er-ing \((-o-)in \) 1: to slaughter
and dress for market <~ hogs> 2: to kill in a barbarous manner
3: BOTCH <~ed the play beyond recognition> — butch-er-er\(\)-2--7-7\ n

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Surface (Secopy)

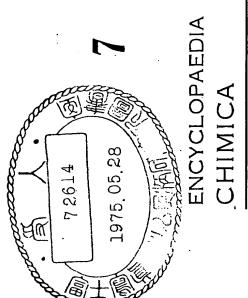
Surface (Second)

Surf

butter up n: to charm or beguile with lavish flattery a mailing phenolic and constitution of the constitut

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化学大辞典編集委員会編



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(国代) 而務事者許認国即太

れた. 1) C2.C3 などの化合物から.

2,3-シクロルブタンとし、これなソール石灰上で熱分解する。!!) プテンまたはプタンを秘媒 | 既に応ずるために多くの工物的製造法が劣架さ 敬作録、イギウなど、脱水袋作用をもつ物置と数する、ii) エチルアルコールと、それてり窓早されるアカトアルデにドこの等も心臓合物を脱水縮合させる、iii) アカチァンかのアキャア これを脱水する. 2) Ci 化合物から. i) プタノールを石英管中, 胸土上あるいはアイソウ土上 ノールを脱水して、もしくは石油分解ガス中か ち 分離される プテンを 塩紫化して 1,2-または ルデビドか合成し、これを2分子型合きサイフルドールとし、更に水器化して B-フチンングリコールを約, 限水してブタジェンとする. iv) アセチレンとアセトアルデヒドをアセチレ ン餌を触媒として結合させて符られるプチンジ ナール如水桜化した 1,4-プタンジャールとし、 で分解しても生するが、いっそうよいのはプタ ンまたはエチレンとアセチャン躍合物を酸深。

レタンドン

しル樹脂の商品名. ファーク状およびシート状 かもる. 一十 ポッドニ ハンチャール

他のアセチレン同族体とともに副生する、製法1.4-ジクロルプチンをナトリウムアミドまたは CH≖CC≡CH 50.1. 電弧法*によりメタン **水強化アルカリで脱氧化水溶して得られる。体** 以下では安定であるが、常温では不安 容徴のアセトンK容解する, アンモニア性塩化 餡(I)と反応してカッ色ないし致カッ色の爆発 ブタンイン, ジト カチ フン, ピトセチレン diacetylene, biacetylene ma CH. かつアセチァンかつくろとぎ 記な気体、殻固点 ―36.4。 沸点 10.3。 4。 無定形の不容物になる。 一70° で数時 間保存することができる、アセトンに易俗:ク ロロホルムに同格。 液体プタジインは 0° セ固 性沈殿物を生する. エタノール溶液では水酸化 アルカリの存在でエタノール1分子の付加物を 0.7364, ng 1.4198. 佐酒では狙合してカッ色. Sutadiin, Diacetylen, Biacetylen] 'Æbutadiyne,

跨導体 銀塩 C,Ag2: 爆発性,トウ質色の固 **売ペンポン溶板でシメチルドミンと容易に反応** CHECCECH CH3, NH (CH3)2NCH=CHCECH ROH + CH = CC = CH --- ROCH = CHC = CH

(1) 二型結合2個をもつ炭素原子数4の鎖 シの2個の異性体があるが工業的には後者のほ うがはるかに粗製なので、単にブタジェンとい えば 1,3-プタ ジェンをさす場合が多い、1,2-プタジェンについては メチルア レンの 項を物 4 Butadien] 状段化水栄をいい、1.2- および 1,3-ブタジェ (免谷文古) 体、最期保存するとカッ色になる [5€ butadiene ・アタジエン

: (2) 1,3-ブタジモン, ジビニル, ピピコル, inyläthylen, Pyrolylen, Erythren) CH2=CHCH=CH3

あんとしより当の窓心解 こカアルコールから メチルプテンを組入生 じたものと推察される. 次いで 1866 年にアセ ときに生ずることが,また 1873 年には圧縮した石炭ガス中に含まれることが,更に 1886 年 ではコチフン、ペンタン、ヘキャンなどの数分 によって生ずることが知られた、 フーポル油中 アレンとエチレンの国合物を赤松鉄管中に画す

-54.1, 1863 年にはじ カリテリチンン プロコフン ドロトフン は 1,3-butadiene, butadiene, divinyl, bivinyl, 3-Butadien, Butadien, Divinyl, Bivinyl, vinylethylene, pyrolylene, erythrene

解生成ガス中に存在することが知られた。 製法 20 世紀初め ごろから 合成ゴス原料としての 縮

キード等しい、一つの同じ形の軽値中を用いる代わりに、1回のジュワーに火をちょうビ中央で中仕づりなりくった形の二十形もある。またで中仕回りなりくった形の二十形もある。また 状めた黙伽では、外部との熱交換に基づく顕遊 い題気ユネルギーを加えてその個政治から比例 の磁を求める、6)の目的には二つの欧州をそれ **ポカイギンのBの製造計中で格保しつり、製剤なったく数祭しながら過度の下がる毎回のある数色は下のほのエボルのでの表面の形がのできる数を開発に関係するアディーを加入、作に同力を回りを回り、** じ温度に保てば溶解熱の遊は加えた電気エネル 数電対を用いる代わりにAおよびBに全く等し い抵抗温度計を入れて, その抵抗の盤を利用す る方法もある.いずれにしても二子形熱盘肝で 好をそれぞれAおよびBの熱量計に入れ、等し (む木砕子) がぎわめて小さいのが政所である。女徴 化学路母, 5(丸苺, 1928)

この1粒の光光かフタ中に深といってとがも **量:58.94)は原子出も近似し,性質も似ている** コッケル(原子位:58.71)とコパルト(原子 ふたごげんそ 双子元霖 [stwin elements] 原子母がほぼ等しく,よく似た性質なもづこ (日本 (日) のたその包とすることがたぎる.

ムとジブチルフミノブロビルクロリドを縮合さ | du Pont de Nemours & Co. Inc. 製のプチラ 7 x y 3 E.1. ブタサイト [英Butacite]

の別称、酸化により金属原子が不足して異常半 | せる、性質・無色の当状液体、用途・低酸塩と 脱跡体 院殿雄、陌殿プタカイン (N.E) **した 昭 圧 秩 撃 凝 下 圧 い む む る**

(CisHsoNzOz)z·HzSO4: 無英の白色結晶性的 **ド眼柱,耳母鉢で用いつれる.脂形に街路** アカトンに易浴:クロロホルムに解俗:エ **ーケルに不裕. 局所麻酔薬として数菌麻酔** 米. 題点 100~103。水、過エダノール、 **したたくわえる.**

Psoralea corcylifolia L. の粗

CiiHeOs=186. クセリン駅

おイト

母谷の一つ 存在

した 6-オキシク セランドリンゴ酸を縮合し

子から得られる. 製法 6-オキシクマリンを選

むしい2個の熱品計より成り,両者の過度差を 熱電対*(数十~数千対を直列)で測定するもの 二子形聚虫野 #Zwillingskalorime-大中で, 形状, 辞徴の で, 1) 反応徴 2) 溶解散 3) 協合数 4) 結 釈教などの財密製造 5) 二つの類似した観教 の認定に用いられる。1)~4)の目的には、一方 の比較の強 6) 二つの政権の路解的の強など **ふたいがた ねつりょうけい** 慰白野*の一個. calorimeter

帝:熱時可裕,發性にすると回収される。

監

@Psoromsaure] ブソロムさん

の熱量計Aで反応、溶解、固合、希釈などの過程を行なう、この過程が吸熱ならAの温度が下 程を行なり、この過程が吸熱ならAの温度が下がり熱化対に熱起電力を生げるが、Aで過程を 行なうと同時に Aに協えた観点器に観然を通じ **て紹介数的公内数数的力を出しないようにすれ** 顔定される.過程が発熱の場合には,他の熱量 たいようにすると,AおよびBの結溢が全く等 ば,汝める愁母は加えた陶気エネルギーとして 計Bに電気エネルギーを加えて熟起電力を生 たジェドログンシ ワンかパラジケム 心脱水 粘し

しいかの、状める慰母は信えたி数コポケポー は冗異熱位計を参照)、5)の目的には二つの数 **たむしへなる(院牧+キゥキーの 図所たりさん ルから英格品)、 阻点 169~170。 ユーナル, 石** 治トーナン, 水下鐵路:H女ノーグ, クロロホ ルムに回路. 水酸化ナトリウム水溶液に冷晦水 [₩ psoromic acid cata Nyl., Cladonia CleH140g=358, 粒女デブ かドンピーし、 体柏 地女 Alectoria sul (年別紀三) (Flot.)

alpicola

CHO

√-0CH,

ģ

Wain. 性質 無色針 鉄(田)でプドウ酒赤色を呈する。 サラシ粉で質 エニルヒドラゾン C17H13O7(CH= しゲル,よタノール,クロロホルもに繋符:1 カトンに可俗、破硫酸で血赤色な品する、 塩化 **状癌(オメノーラから丼結晶). 独点 262。** 000 000

NNHC。Hs): 该質色對狀晶. 融点 272°(分 メチルエステル ChHio(COOCHs): 針状晶(アセトンから再結晶). 融点 211。塩化鉄

吸促性質科を扱るとき用いる一型の防湿管の 称、吸退性の試料を自会ポートに入れて空気 [≉pig Wägegläschen] (1) 英田松) 田)でカッ赤色を呈する.

中で出るときは、教料が図攷を収収してだんだんとも知りていくのでと。 ク値することができない。 ことができる. キャップの先は毛管にたってい ばれることがある。 一 ヒョク型源斗(版本券票) ス製の防退保設管に入れて畳れば目的を違する なるようなことはない、プタは形の上からつけられた名称で、そのほかプタの子, 虫などとよ るので異空中で乾燥してもキャップが抜けなく このときは図のようなガラ

局形麻酔蒸*. 数 ルアミノプロピルアル コークを紹合されて題 ClaHsoN2O2= 塩化 ケートロペ ソジイドカ アングチ 元するか。または ターアミノ安忌谷酸ナトリケ ブタカイン [**butacaine] COO(CH3), N(C,H2), 306.

プンラレン [英psoralen 畑Psoralen] 母体となるのたこのようによばれる。 0.00 レンルフソ

BE**BERAYIWBYHTEOB**LA

而然事并特別国即太

ルミーケムクズの上で熱分解する. またキチル を用いて脱水架する. iii) ユチルユーテルをフ

キサンを熱分解する。4) 石油留分の熱分解(特 にユチレン製造のための)における生成ガスか ら分離する。以上の踏法のうち現在。 松大生産 国であるアメリカではプテンおよびプタンを脱 ピュルメーテルもしくはアセトフルデヒドモノ **コチルアセタールを 慰分解 する.3)シクロヘ**

水紫する方法が多く採用され、また分解ガスか 5の抽出も実施されている. アルコールなどを

ッパにおいては、分解ガスからの抽出が大きな割合を占めているほか、アセチレンから出発す 合成ゴム KK(四日市)がプテンおよびブタンの 用いる方法は現在休止中である。一方, ヨーロ る方法もなお採用されている. わが固では日本

脱水素法を, また日本石油化学 KK(川感)が分 **解ガスからの袖出法を実施している.分離・精** 製法 実数室的には液体亜硫酸と反応させて避

二间格 択的に結晶性の付加化合物,スルホン CH2CH= =CHCH₂SO₂ を形成させ、これを 120°で既分解 アンモニア俗族と向流搭触させて選択的に抽出 する. 本法を CAA 法(英cuprous ammonium acetate process) という、フルフラールを加 えて袖出族留する方法もある。構造 ド紀子物 合が共役した最も簡単な共役二国格合系であ して純品を得る.工業的には.ガス状で酢酸銅-袖の間かのみれば、 アタジォンは

電子が中央の単結合を通じて互いに作用する になる.このことはプタシェンの炭素-炭紫斑 る.このような系においては二つの二重結合の 逆に両端の二低語合は多少単結合性をもつこと **信果,中央の単結合は若干二面結合性をもち,**

結合の結合間隔の実別値が 1,46人 で, 通常の

単語台の結合間隔の値 1.54人 より短い事実と